



CP 2812

PATENT  
29926/37960

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

**CHO et al.**

Serial No. 10/054,520

Filed: January 22, 2002

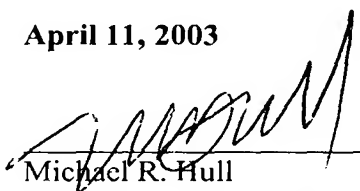
For: METHOD OF FORMING  
MEMORY DEVICE

Group Art Unit: 2812

Examiner: Not Yet Assigned

) I hereby certify that this paper is being  
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**April 11, 2003**

  
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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
Washington, DC 20231

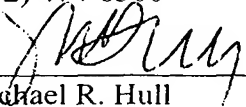
Sir:

The patents listed on the enclosed PTO/SB/08 are submitted pursuant to  
37 C.F.R. § 1.56, § 1.97 and § 1.98. Copies of the patents are enclosed as necessary.  
This information disclosure statement is being filed, to the best of the undersigned's  
knowledge, before the mailing date of a first Office action on the merits. In  
accordance with 37 CFR §1.97(b), no certification or fee is required.

Respectfully submitted,

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U.S. Department of Commerce  
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Atty. Docket No.

29926/37960

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Applicant

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01/22/2002

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## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

## FOREIGN PATENT DOCUMENTS

*Examiner Initials		Document Number	Publication Date	Country	Class	Subclass	Translation	
							Yes	No
	B01	KR 2001-37680	05/15/2001	Korea			Abstract	

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



**KR Laid-Open No. 2001-37680**

**Published on May 15, 2001**

**Capacitor and method for forming the same**

This invention relates to a method for forming a capacitor in a semiconductor device; and, more particularly, to a method for forming a capacitor with use of a simplified process. A TiN layer or any metal layer to which a chemical vapor deposition (CVD) technique can be applied is used for the lower electrode of the capacitor. A dielectric layer uses  $\text{Al}_2\text{O}_3$ , and a polysilicon layer or a metal layer is used as an upper electrode of the capacitor. Also, the capacitor is formed in a cylinder shape; however, the lower electrode is directly contacted to a landing pad without a contact plug. As a result of this direct contact, it is possible to simplify a process as well as to obtain a required capacitance even in a minimum area.